

REMARKS

Upon entry of this paper, no claims have been amended, no claims have been canceled, and no claims have been added as new claims. Thus, claims 1-18 are presently pending in this application. No new matter has been added.

Rejections under 35 U.S.C. 103(a)*Claims 1-18*

Claims 1-18 were rejected under 35 U.S.C. 103(a) as being obvious over Behning (USPN 5,067,909) in view of Ramsay et al (USPN 4,146,288). This obviousness rejection is respectfully traversed in view of the following comments, in which Applicant submits the combined references fail to teach or suggest all the claimed limitations.

Applicant respectfully submits that to establish a *prima facie* case there must be some suggestion or motivation, either in the prior art or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine multiple reference teachings. There must then be a reasonable expectation of success. Finally, the prior art reference or references (when combined) must teach or suggest all the claimed limitations.

As confirmed in the Office Action at page 3, “Behning does not explicitly disclose that the receptacle tab includes an inclined back surface that extends at a negative angle relative to an axis of rotation of the collar.” However, Applicant respectfully submits that Ramsey does not disclose “an inclined back surface that extends at a negative angle relative to an axis of rotation of the collar” (*see* claims 1 and 17, *see also* claim 15 stating in alternative language “angled back wall extending radially forward and axially backward from the longitudinal wall”, which indicates a negative angle). Rather, Ramsey only shows surfaces having a positive angle relative to an axis of rotation of the collar.

Specifically, the Office Action points to col. 2, lines 9-13 of Ramsay to support a suggestion or teaching of a “negative angle” as described and claimed in the pending application. However, there is no reference whatsoever to an angle relative to an axis of rotation of a collar, or similar component, in Ramsay. Furthermore, Ramsay merely describes a “chamfer” that “provides an inclined plan over which the chamfered finger face may ‘ride up’, causing a radially outward finger deflection and sliding of the finger nose over the ring perimeter surface”. There is no description, or depiction, of a negative angle. It can clearly be seen in FIG. 2 of Ramsay that the “engaging faces 21 and 22”, which correspond to the “back surfaces” of the pending claims, are *positively angled* relative to an axis of rotation of the collar, not negatively angled. The positive angle enables the engaging faces 21 and 22 to easily slide along each other if an axial force is applied to pull the coupling apart. The engaging faces 21 and 22 do not dig into each other, or lock together more firmly to inhibit sliding of the collar tab, upon application of an axial force pulling the coupling apart, as is the case with negatively angled faces. The positive angle of the Ramsay design allows for an axial force to pull the coupling apart and cause a “radially outward finger deflection”.

Said differently, Applicant draws the Examiner’s attention to the Specification, where the negative angle as claimed is further described. An example embodiment being claimed in claims 1, 15, and 17 is depicted in FIG. 9 of the pending application, and described on page 9. Specifically, at page 9, lines 20-28, it states:

As shown, the back surface 362” of the reinforcing tab 220” is inclined from the radial axis B-B to form a ramp that extends at a negative angle $-\theta$, i.e., in a direction that is axially backward and radially forward from a back point 335” of the camming tab 220”. According to the illustrative embodiment, the back surface 362” of the receptacle camming tab extends at an angle $-\theta$ to *reinforce* the connection between the bodies by urging an engaged collar camming tab 210 in the radially backward direction, away from the ramp 370. The configuration of the back surface 362” thus inhibits sliding of the collar tab 210 toward the ramp, thereby preventing release of the collar tab 210 from the camming tab 220” of the second connector 30”.

The difference between the positive angle and the negative angle is best captured in the resulting functionality of the two angles. The positive angle of Ramsey, “provides an inclined plan over which the chamfered finger face may ‘ride up’. . .” (*see* col. 2, lines 9-10). Contrarily,

with the negative angle of the present invention and pending claims, “[t]he configuration of the back surface 362” thus *inhibits sliding* of the collar tab 210 toward the ramp (emphasis added) . . .” Accordingly, the combination of Ramsay with Behning fails to teach or suggest all elements of the present claimed invention. Instead, Ramsay in fact teaches away from the device described by the pending claims.

Furthermore, Ramsay likewise teaches away from the proposed combination or modification. One Behning teaches a preferred condition which does not occur when the combination or modification is made as suggested. Specifically, Behning indicates that with the back surfaces not having an angled relationship to the axis of rotation of the collar as shown in the embodiment described, “[t]o disengage the first and second bodies the collar is manually rotated in the direction of its arrowhead 30.” (col. 3, lines 1-2). Furthermore, “[d]isengagement is therefore effected without pulling and straining the cord extending from the plug1, because rotation of the collar is in a plan at right angles to the axis of the plug and the cord” (col. 3, lines 8-11). Behning states that a pulling action, such as that which results from the “excessive axial tensile stress” (Ramsay, col. 2, line 7) resulting from an axial pull on a cord extending from the coupling, is not the mechanism for disengagement. If one were to modify Behning in accordance with the positively angled chamfer of Ramsay, the resulting device would be counter to a preferred condition of Behning, thus preventing one of ordinary skill in the art from considering such combination obvious.

Applicant therefore respectfully submits that Behning and Ramsey, either individually or in combination, fail to teach or suggest every characteristic of Applicant’s claims 1, 15 and 17. Dependent claims 2-14, 16, and 18 are also allowable based on their dependency on the aforementioned independent claims in addition to their own claimed characteristics. Applicant further submits that all pending claims of the present invention are not obvious with respect to, and are therefore allowable over, the cited document.

CONCLUSION

In view of the foregoing, it is respectfully submitted that this application is now in condition for allowance. Applicant courteously solicits allowance of the claims in the form of a Notice of Allowance. Should there be any outstanding issues of patentability following the entry of this response, a telephone interview is respectfully requested to resolve such issues.

Please charge any shortage or credit any overpayment of fees to our Deposit Account No. 12-0080. In the event that a petition for an extension of time is required to be submitted herewith, and the requisite petition does not accompany this response, the undersigned hereby petitions under 37 C.F.R. §1.136(a) for an extension of time for as many months as are required to render this submission timely. Any fee due is authorized to be charged to the aforementioned Deposit Account.

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Respectfully submitted,

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